RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/579.428A
Source:	1FWO.
Date Processed by STIC:	. 2/1/07

ENTERED



IFWO

RAW SEQUENCE LISTING DATE: 02/01/2007
PATENT APPLICATION: US/10/579,428A TIME: 15:07:22

Input Set : A:\PTO.SS.txt

Output Set: N:\CRF4\02012007\J579428A.raw

```
3 <110> APPLICANT: CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS
             BIONOSTRA, S.L.
      6 <120> TITLE OF INVENTION: CHIMERIC EMPTY CAPSIDS OF THE INFECTIOUS BURSAL DISEASE
VIRUS (IBDV),
              OBTAINMENT PROCESS AND APPLICATIONS
      9 <130> FILE REFERENCE: 7572-73329-01
     11 <140> CURRENT APPLICATION NUMBER: US 10/579,428A
     12 <141> CURRENT FILING DATE: 2006-05-12
     14 <150> PRIOR APPLICATION NUMBER: ES P200400120
     15 <151> PRIOR FILING DATE: 2004-01-21
     17 <160> NUMBER OF SEQ ID NOS: 14
     19 <170> SOFTWARE: PatentIn version 3.1
     22 <210> SEQ ID NO: 1
     23 <211> LENGTH: 35
     24 <212> TYPE: DNA
     25 <213> ORGANISM: Artificial sequence
     27 <220> FEATURE:
     28 <223> OTHER INFORMATION: Oligo I primer
     30 <400> SEQUENCE: 1
                                                                               35
     31 gcgcagatct atgacaaacc tgtcagatca aaccc
     34 <210> SEQ ID NO: 2
     35 <211> LENGTH: 34
     36 <212> TYPE: DNA
     37 <213> ORGANISM: Artificial sequence
     39 <220> FEATURE:
     40 <223> OTHER INFORMATION: Oligo II primer
     42 <400> SEQUENCE: 2
     43 gcgcaagctt aggcgagagt cagctgcctt atgc
                                                                               34
     46 <210> SEO ID NO: 3
     47 <211> LENGTH: 7595
     48 <212> TYPE: DNA
     49 <213> ORGANISM: Artificial sequence
     51 <220> FEATURE:
     52 <223> OTHER INFORMATION: Plasmid pFBD/pVP2-his-VP3
     54 <220> FEATURE:
     55 <221> NAME/KEY: promoter
     56 <222> LOCATION: (157)..(285)
     57 <223> OTHER INFORMATION: Promoter ppolh
     59 <220> FEATURE:
    60 <221> NAME/KEY: CDS
     61 <222> LOCATION: (291)..(1289)
     62 <223> OTHER INFORMATION: pVP2 ORF
```

65 <221> NAME/KEY: promoter

64 <220> FEATURE:

Input Set : A:\PTO.SS.txt

\cdot	
66 <222> LOCATION: (7443)(7503)	
67 <223> OTHER INFORMATION: Promoter pl0	
69 <400> SEQUENCE: 3	60
70 gggtgatcaa gtcttcgtcg agtgattgta aataaaatgt aatttacagt atagtatttt	60 120
72 aattaatata caaatgattt gataataatt cttatttaac tataatatat tgtgttgggt 74 tgaattaaag gtccgtatac tccggaatat taatagatca tggagataat taaaatgata	180
76 accatctcgc aaataaataa gtattttact gttttcgtaa cagttttgta ataaaaaaac	240
78 ctataaatat teeggattat teatacegte ceaceategg gegeggatet atg aca	296
79 Met Thr	
80 1	
82 aac ctg tca gat caa acc cag cag att gtt ccg ttc ata cgg agc ctt	344
83 Asn Leu Ser Asp Gln Thr Gln Gln Ile Val Pro Phe Ile Arg Ser Leu	
84 5 10 . 15	
86 ctg atg cca aca acc gga ccg gcg tcc att ccg gac gac acc ctg gag	392
87 Leu Met Pro Thr Thr Gly Pro Ala Ser Ile Pro Asp Asp Thr Leu Glu	
88 20 25 30	
90 aag cac act ctc agg tca gag acc tcg acc tac aat ttg act gtg ggg	440
91 Lys His Thr Leu Arg Ser Glu Thr Ser Thr Tyr Asn Leu Thr Val Gly	
92 35 40 45 50	
94 gac aca ggg tca ggg cta att gtc ttt ttc cct gga ttc cct ggc tca	488
95 Asp Thr Gly Ser Gly Leu Ile Val Phe Pro Gly Phe Pro Gly Ser	
96 55 60 65	E26
98 att gtg ggt gct cac tac aca ctg cag ggc aat ggg aac tac aag ttc	536
99 Ile Val Gly Ala His Tyr Thr Leu Gln Gly Asn Gly Asn Tyr Lys Phe 100 70 75 80	
102 gat cag atg etc etg act gee cag aac eta eeg gee agt tae aac tae	584
103 Asp Gln Met Leu Leu Thr Ala Gln Asn Leu Pro Ala Ser Tyr Asn Tyr	301
104 85 90 95	
106 tgc agg cta gtg agt cgg agt ctc aca gtg agg tca agc aca ctt cct	632
107 Cys Arg Leu Val Ser Arg Ser Leu Thr Val Arg Ser Ser Thr Leu Pro	
108 100 105 110	
110 ggt ggc gtt tat gca cta aac ggc acc ata aac gcc gtg acc ttc caa	680
111 Gly Gly Val Tyr Ala Leu Asn Gly Thr Ile Asn Ala Val Thr Phe Gln	
112 115 120 125 130	
114 gga agc ctg agt gaa ctg aca gat gtt agc tac aat ggg ttg atg tct	728
115 Gly Ser Leu Ser Glu Leu Thr Asp Val Ser Tyr Asn Gly Leu Met Ser	
116 135 140 145	556
118 gca aca gcc aac atc aac gac aaa att ggg aac gtc cta gta ggg gaa	776
119 Ala Thr Ala Asn Ile Asn Asp Lys Ile Gly Asn Val Leu Val Gly Glu	
120 150 155 160	824
122 ggg gtc acc gtc ctc agc tta ccc aca tca tat gat ctt ggg tat gtg 123 Gly Val Thr Val Leu Ser Leu Pro Thr Ser Tyr Asp Leu Gly Tyr Val	024
123 GIY VAI IIII VAI HEU SEI HEU FIO IIII SEI IYI ASP HEU GIY IYI VAI 124 165 170 175	
126 agg ctt ggt gac ccc att ccc gca ata ggg ctt gac cca aaa atg gta	872
127 Arg Leu Gly Asp Pro Ile Pro Ala Ile Gly Leu Asp Pro Lys Met Val	0.1
128 180 185 190	
130 gcc aca tgt gac agc agt gac agg ccc aga gtc tac acc ata act gca	920
131 Ala Thr Cys Asp Ser Ser Asp Arg Pro Arg Val Tyr Thr Ile Thr Ala	
132 195 200 205 210	

Input Set : A:\PTO.SS.txt

								tca										968
		Ala	Asp	Asp	Tyr		Phe	Ser	Ser	Gln		Gln	Pro	Gly	GLY		Thr	
	136				++-	215	~~~			~~+	220	25.0	2.02	200	at a	225	att	1016
				_			_	aac Asn		_	_							1016
	140	116	IIII	шец	230	Ser	міа	ASII	116	235	Ата	116	1111	261	240	Ser	vai	
		aaa	gga	σaσ		at.a	ttt	cga	aca		atc	cac	aac	ctt		cta	aac	1064
								Arg										
	144	2	2	245					250				-	255				
	146	gcc	acc	atc	tac	ctc	ata	ggc	ttt	gat	ggg	aca	acg	gta	atc	acc	agg	1112
	147	Ala	Thr	Ile	Tyr	Leu	Ile	Gly	Phe	Asp	Gly	Thr	Thr	Val	Ile	Thr	Arg	
	148		260					265					270					
								ggg										1160
			Val	Ala	Ala	Asn		Gly	Leu	Thr	Thr	_	Thr	Asp	Asn	Leu		
		275					280					285					290	1200
								cca Pro										1208
	156	Pro	Pne	ASII	ьeu	va1 295	тте	PIO	THE	ASII	300	TIE	1111	GIII	PIO	305	IIII	
		tac	atc	aaa	cta		ata	qtq	acc	tcc		agt	aat	aat	cag		aaa	1256
					_			Val				_			_	_		2250
	160	501		_,_	310	010				315	-7-		1	1	320		1	
		gat	cag	atg	tca	tgg	tcg	gca	aga	ggg	agc	cta	gcag	gtgad	ga	tccat	ggtgg	1309
		_	_	_			_	Āla	-									
•	164			325					330									
							_	_	-	_			-	_			aacagg	1369
			_	_		_	-										actage	1429
																	aaatt	1489
																	gtacac	1549 1609
																	gcagg ggtctc	1669
		_	_			_											ctacct	1729
																	agcaag	1789
		_															actaga	1849
																	cccac	1909
	186	acct	ccc	ect g	gaaco	ctgaa	aa ca	ataaa	aatga	ate	gcaat	tgt	tgtt	gtta	aac	ttgti	tattg	1969
																	catttt	2029
																	ctgga	2089
																	caaact	2149
			-					_									ctattt	2209
																	ccaact	2269 2329
																	atcctg	2329
																	gaaaat atttgc	2449
																	gtggtg	2509
																	gettte	2569
																	gggctc	2629
																	agggt	2689
																	tggag	2749
																	atctcg	2809
														•				

Input Set : A:\PTO.SS.txt

			agggattttg				2869
218	ctgatttaac	aaaaatttaa	cgcgaatttt	aacaaaatat	taacgtttac	aatttcaggt	2929
220	ggcacttttc	ggggaaatgt	gcgcggaacc	cctatttgtt	tatttttcta	aatacattca	2989
222	aatatgtatc	cgctcatgag	acaataaccc	tgataaatgc	ttcaataata	ttgaaaaagg	3049
224	aagagtatga	gtattcaaca	tttccgtgtc	gcccttattc	ccttttttgc	ggcattttgc	3109
			agaaacgctg				3169
228	ggtgcacgag	tgggttacat	cgaactggat	ctcaacagcg	gtaagatcct	tgagagtttt	3229
230	cgccccgaag	aacgttttcc	aatgatgagc	acttttaaag	ttctgctatg	tggcgcggta	3289
			gcaagagcaa				3349
234	gacttggttg	agtactcacc	agtcacagaa	aagcatctta	cggatggcat	gacagtaaga	3409
236	gaattatgca	gtgctgccat	aaccatgagt	gataacactg	cggccaactt	acttctgaca	3469
238	acgatcggag	gaccgaagga	gctaaccgct	tttttgcaca	acatggggga	tcatgtaact	3529
			ggagctgaat				3589
			aacaacgttg				3649
			aatagactgg				3709
			tggctggttt				3769
			agcactgggg				3829
			ggcaactatg				3889
			ttggtaactg				3949
			ttaatttaaa				4009
			acgtgagttt				4069
			agatcctttt				4129
			ggtggtttgt				4189
			cagagcgcag				4249
			gaactctgta				4309
			cagtggcgat				4369
			gcagcggtcg				4429
			caccgaactg				4489
			aaaggcggac				4549
			tccaggggga				4609
			gcgtcgattt				4669
			ggccttttta				4729
			atcccctgat				4789
			cagccgaacg				4849
			gtattttctc				4909
			caaaatcggt				4969
288	taagcgggtg	tgggcggaca	ataaagtctt	aaactgaaca	aaatagatct	aaactatgac	5029
290	aataaagtct	taaactagac	agaatagttg	taaactgaaa	tcagtccagt	tatgctgtga	5089
			ttatggctaa				5149
			ggcgtggcca				5209
			ctccgcggcc				5269
298	taggtggcgg	tacttgggtc	gatatcaaag	tgcatcactt	cttcccgtat	gcccaacttt	5329
300	gtatagagag	ccactgcggg	atcgtcaccg	taatctgctt	gcacgtagat	cacataagca	5389
			cttgaggaga				5449
			gagatcatag				5509
			gagagcgcca				5569
			gagcaagttc	_			5629
		_	gaactcacga				5689
			cctacatgtg				5749

Input Set : A:\PTO.SS.txt

```
314 tttgttttag ggcgactgcc ctgctgcgta acatcgttgc tgctgcgtaa catcgttgct
                                                                         5809
316 gctccataac atcaaacatc gacccacggc gtaacgcgct tgctgcttgg atgcccgagg
                                                                         5869
318 catagactgt acaaaaaaac agtcataaca agccatgaaa accgccactg cgccgttacc
                                                                         5929
320 acceptgcgt teggteaagg ttetggacca gttgcgtgag cgcatacgct acttgcatta
                                                                         5989
322 cagtttacga accgaacagg cttatgtcaa ctgggttcgt gccttcatcc gtttccacgg
                                                                         6049
324 tgtgcgtcac ccggcaacct tgggcagcag cgaagtcgag gcatttctgt cctggctggc
                                                                         6109
326 gaacgagcgc aaggtttcgg tctccacgca tcgtcaggca ttggcggcct tgctgttctt
                                                                         6169
328 ctacggcaag gtgctgtgca cggatctgcc ctggcttcag gagatcggta gacctcggcc
                                                                         6229
330 gtcgcggcgc ttgccggtgg tgctgacccc ggatgaagtg gttcgcatcc tcggttttct
                                                                         6289
332 ggaaggcgag catcgtttgt tcgcccagga ctctagctat agttctagtg gttggcctac
                                                                         6349
                                                                         6409
334 gtaccegtag tggctatggc agggcttgcc gccccgacgt tggctgcgag ccctgggcct
336 tcacccgaac ttgggggttg gggtggggaa aaggaagaaa cgcgggcgta ttggtcccaa
                                                                         6469
338 tqqqqtctcq qtqqqqtatc qacaqaqtqc caqccctggq accgaacccc gcgtttatga
                                                                         6529
340 acaaacqacc caacacccqt qcqttttatt ctqtcttttt attqccqtca tagcqcgggt
                                                                         6589
342 teetteeggt attgteteet teegtgttte agttageete eeccatetee eggtaeegea
                                                                         6649
344 tgcctcgaga ctgcaggctc tagattcgaa agcggccgcg actagtgagc tcgtcgacgt
                                                                         6709
346 aggeetttga atteeggate eteaeteaag gteeteatea gagaeggtee tgateeageg
                                                                         6769
348 gcccagccga ccagggggtc tctgtgttgg agcattgggt tttggcttgg gctttggtag
                                                                         6829
350 agcccgcctg ggattgcgat gcttcatctc catcgcagtc aagagcagat ctttcatctg
                                                                         6889
352 ttettggttt gggecaegte catggttgat tteatagaet ttggcaaett egtetatgaa
                                                                         6949
354 agettggggt ggetetgeet gteetggage eeegtagate gaegtagetg eeettaggat
                                                                         7009
356 ttgttcttct gatgccaacc ggctcttctc tgcatgcacg tagtctagat agtcctcgtt
                                                                         7069
358 tgggtccggt atttctcgtt tgttctgcca gtactttacc tggcctgggc ttggccctcg
                                                                         7129
360 gtgcccattg agtgctaccc attctggtgt tgcaaagtag atgcccatgg tctccatctt
                                                                         7189
362 ctttgagate egtgtgtett ttteeetetg tgetteetet ggtgtgggge eeegageete
                                                                         7249
364 cacteegtag cetgetgtee egtaettgge cetttgegae ttgetgeetg ettgtggtge
                                                                         7309
                                                                         7369
366 gtttgcaaga aaatttcgca tccgatgggc gttcgggtcg ctgagtgcga agttggccat
368 gtcagtcaca atcccattct cttccagcca catgaacaca ctgagtgcag attggaatag
                                                                         7429
370 tgggtccacg ttggctgctg cttccattgc tctgacggca ctctcgagtt cgggggtctc
                                                                         7489
372 tttgaactct gatgcagcca tggcgccctg aaaatacagg ttttcggtcg ttgggatatc
                                                                         7549
                                                                         7595
374 gtaatcgtga tggtgatggt gatggtagta cgacatggtt tcggac
377 <210> SEQ ID NO: 4
378 <211> LENGTH: 333
379 <212> TYPE: PRT
380 <213> ORGANISM: Artificial sequence
382 <220> FEATURE:
383 <223> OTHER INFORMATION: pVP2-his-VP3 protein
385 <400> SEQUENCE: 4
386 Met Thr Asn Leu Ser Asp Gln Thr Gln Gln Ile Val Pro Phe Ile Arg
387 1
                                        10
389 Ser Leu Leu Met Pro Thr Thr Gly Pro Ala Ser Ile Pro Asp Asp Thr
                                    25
392 Leu Glu Lys His Thr Leu Arg Ser Glu Thr Ser Thr Tyr Asn Leu Thr
                                40
395 Val Gly Asp Thr Gly Ser Gly Leu Ile Val Phe Phe Pro Gly Phe Pro
398 Gly Ser Ile Val Gly Ala His Tyr Thr Leu Gln Gly Asn Gly Asn Tyr
                                            75
                        70
401 Lys Phe Asp Gln Met Leu Leu Thr Ala Gln Asn Leu Pro Ala Ser Tyr
```

VERIFICATION SUMMARY

DATE: 02/01/2007

PATENT APPLICATION: US/10/579,428A

TIME: 15:07:23

Input Set : A:\PTO.SS.txt